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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,474	03/17/2004	Stan Cheng	23724-08325	5465

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FENWICK & WEST LLP  
SILICON VALLEY CENTER  
801 CALIFORNIA STREET  
MOUNTAIN VIEW, CA 94041

EXAMINER
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GABLER, PHILIP FRANCIS

ART UNIT	PAPER NUMBER
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3637

DATE MAILED: 08/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/803,474	<b>Applicant(s)</b> CHENG, STAN	
	<b>Examiner</b> Philip Gabler	<b>Art Unit</b> 3637	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-6,9-11 and 13-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6,9-11 and 13-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6, 9, 11, and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang (US Patent Number 5164886) in view of Jeong.
3. Regarding claims 1 and 13, Chang (Figure 1) discloses a computer chassis apparatus comprising: a chassis frame (2, including 5, 24, etc.) having a load-bearing surface (upper surface of 5, also 24); a plurality of protrusions (51, also 241) on the load bearing surface, protruding upwardly from the load-bearing surface; and a removable structure (6) adapted to be installed within the computer chassis and configured to house at least one computer component (element 6 is a drive holder), the removable structure configured to fit over at least some of the protrusions of the chassis frame (the holes, 601, of element 6 are fitted over the protrusions for assembly) and be secured laterally thereby. Chang does not disclose the protrusions as supporting a chassis cover (which is present as element 1). Jeong discloses a computer chassis apparatus including a load-bearing surface (upper surface of 40) including protrusions, or means for supporting a chassis cover, (viewed as A in Exhibit 1) configured to support a chassis cover (180). [See Figure 4C and column 4 lines 2-7 for disclosure of 40 (and

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protrusions A) acting as a support for the cover, monitor, etc.] Accordingly, it would have been obvious to one of ordinary skill in the art to replace Chang's protrusions with Jeong's protrusions (i.e. domes which would engage the cover in place of hooks that do not) because this arrangement would provide additional strength and support to the chassis apparatus by better supporting the cover while still securing the removable structure (the holes of the removable structure would be fitted over and around the protrusions, laterally securing the structure).

4. Regarding claim 2, the phrase "for a small form factor computer" is an intended use and is given little patentable weight. However, Chang's frame could house a small form factor computer.

5. Regarding claim 3, Chang, as modified by Jeong as described above, discloses the protrusions are located on a set of external rails (the protrusions are located on rails external to the removable structure and on the top, i.e. external, surface of the frame) that define (at least a portion of) the chassis frame.

6. Regarding claim 4, Chang and Jeong further disclose flat-topped protrusions (see figures).

7. Regarding claims 5 and 6, Chang and Jeong further disclose protrusions which are mounted to and integrally formed with the load-bearing surfaces.

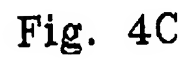
8. Regarding claim 9, Chang further discloses the removable structure receives (in 601) the protrusions of the chassis frame to secure the removable structure thereon.

9. Regarding claim 11, Chang further discloses the removable structure is laterally restrained by the protrusions when installed on the chassis frame.

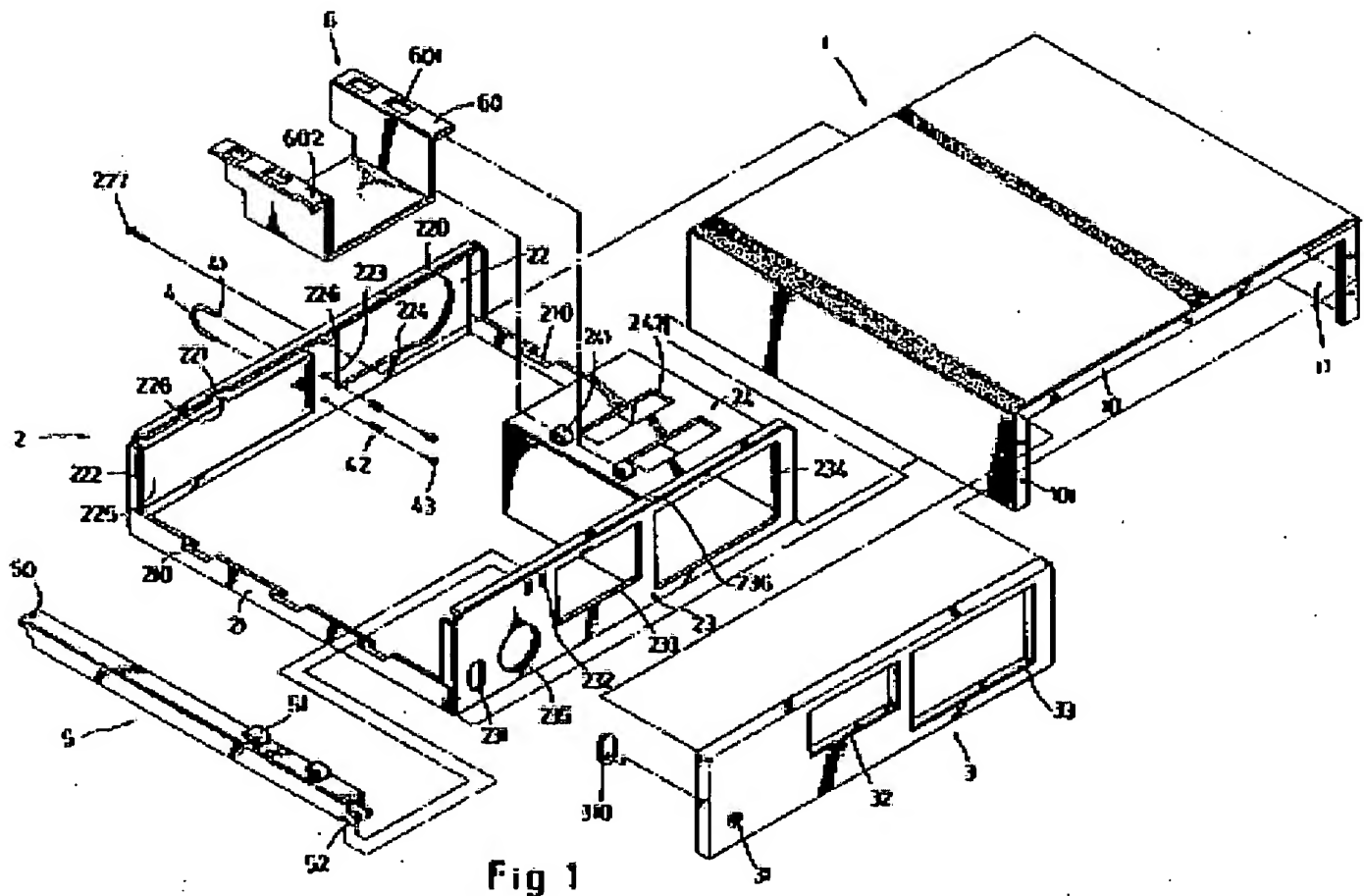
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10. Regarding claim 14, Chang discloses a computer chassis apparatus comprising: a computer chassis frame (2, including 5, 24, etc.) for a form factor computer comprising at least two upward facing surfaces (upper surfaces of 5 and 24); a plurality of oblong rounded structures (51, 241) formed into the upward facing surfaces of the computer chassis frame and distributed along the surfaces; a removable drive frame (6) capable of supporting a plurality of drives of different sizes adapted to be installed within the computer chassis, the removable drive frame comprising interface structures (601) corresponding to each rounded structure. Chang does not disclose domes on the upward facing surfaces. Jeong discloses a computer chassis frame with domes (A) formed on an upward facing surface. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Chang's oblong rounded structures to be domes as taught by Jeong because this arrangement would make installation and removal of the removable drive frame quicker and more simple (the frame could simply be placed on the upward facing surfaces with the interface structures fitting over the domes rather than sliding under hooks).

11. Regarding claim 15, Chang further discloses the load-bearing surface comprises a rail (5) bordering the top of the chassis frame.



**Exhibit 1: Jeong ‘624 Figures 1 and 4C**



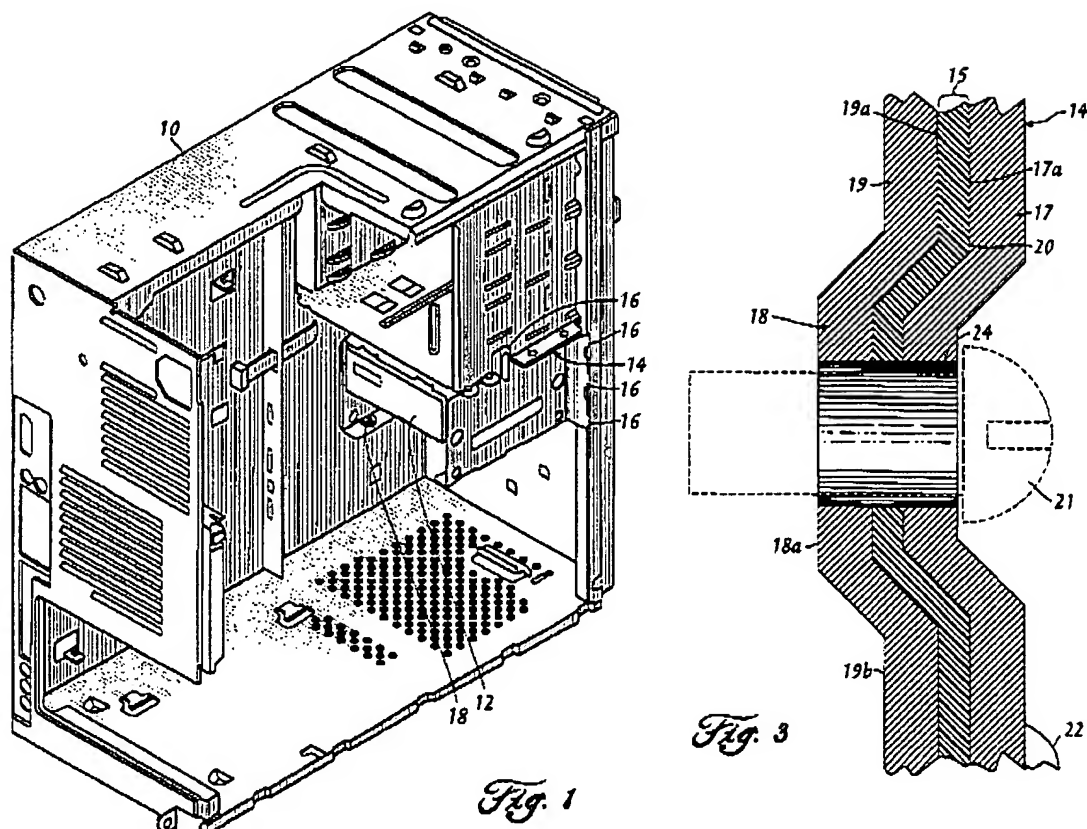
Chang '886 Figure 1

12. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chang in view of Jeong and Johnson et al. (US Patent Number 6310769). Chang (Figure 1) discloses a computer chassis apparatus comprising: a chassis frame (2, including 5, 24, etc.) having a load-bearing surface (upper surface of 5, also 24); a plurality of protrusions (51, also 241) on the load bearing surface, protruding upwardly from the load-bearing surface; and a removable structure (6) adapted to be installed within the computer chassis and configured to house at least one computer component (element 6

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is a drive holder), the removable structure configured to fit over at least some of the protrusions of the chassis frame (the holes, 601, of element 6 are fitted over the protrusions for assembly) and be secured laterally thereby. Chang does not disclose the protrusions as supporting a chassis cover (which is present as element 1) or corresponding protrusions on the removable structure. Jeong discloses a computer chassis apparatus including a load-bearing surface (upper surface of 40) including protrusions, or means for supporting a chassis cover, (viewed as A in Exhibit 1) configured to support a chassis cover (180). [See Figure 4C and column 4 lines 2-7 for disclosure of 40 (and protrusions A) acting as a support for the cover, monitor, etc.] Accordingly, it would have been obvious to one of ordinary skill in the art to replace Chang's protrusions with Jeong's protrusions (i.e. domes which would engage the cover in place of hooks that do not) because this arrangement would provide additional strength and support to the chassis apparatus by better supporting the cover while still securing the removable structure (the holes of the removable structure would be fitted over and around the protrusions, laterally securing the structure). Johnson (Figures 1 and 3) discloses a removable structure (14a) with protrusions (18) corresponding to protrusions on a chassis frame (other member 14a). Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate corresponding protrusions as taught by Johnson on Chang's removable structure because of the more secure mount this could provide.





Johnson '769 Figures 1 and 3

### **Response to Arguments**

13. Applicant's arguments filed 31 July 2006 have been fully considered but they are not persuasive. The motivation for combining the Chang and Jeong references (specifically using Jeong's domes) is clearly presented by Jeong himself (to support the chassis cover under the weight of a monitor, etc. that may be placed on it). One of ordinary skill in the art, having knowledge of the Chang and Jeong references, would be at least as likely to use Jeong's domes in Chang's device, if his desire was to better support a chassis cover, as he would be to change the size of Chang's hooks or move

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his cross bar (as Applicant suggests) because Jeong discloses supporting a cover and domes are Jeong's chosen method. Further, there was no suggestion in the prior Office Action to modify Chang's removable structure as it met the limitations of the claims as set forth. The holes of the removable structure would necessarily be fitted over (and then rest around, not above) the domes of Chang's modified device. Finally, the combination of Chang and Jeong as presented would not significantly change the operation of the Chang device. Chang, as Applicant points out, does state as an object of his invention providing "a computer mainframe housing for a computer system, which has a cross member at the inside for fastening a diskdrive holder through hook joints." Chang's device, when modified by Jeong as described above, provides a computer mainframe housing for a computer system, which has a cross member at the inside for fastening a diskdrive holder using a slightly modified joint, which provides additional benefits as stated above. The combination of the references is valid.

14. Regarding the argument that the combination of Chang and Jeong does not meet the limitations of claim 3, as explained in the above rejection, the combination does in fact meet these limitations. The protrusions are located on rails of Chang's device which are viewed as external (in that they are on the outside, top surface of the frame) and which certainly serve to define a portion of the chassis frame.

15. The remainder of Applicant's arguments with respect to the claims have been considered but are moot in view of the new grounds of rejection.

***Conclusion***

16. Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

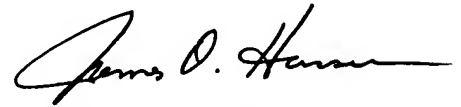
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip Gabler whose telephone number is (571) 272-6038. The examiner can normally be reached on Monday through Friday, 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on (571) 272-6867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PFG *u*  
8/25/2006

  
JAMES O. HANSEN  
PRIMARY EXAMINER